

Claims

What is claimed is:

1. A virtual applications architecture, comprising:
a topology manager for managing applications across a plurality of members; and
a virtual applications manager for defining a plurality of resources comprising the applications;
the topology manager communicates with the plurality of members to initiate scaling of the applications associated with the virtual applications manager to the members.
2. The virtual applications architecture of claim 1 wherein the topology manager is at least one of the members.
3. The virtual applications architecture of claim 1 wherein the topology manager is distributed across the members.
4. The virtual applications architecture of claim 1 wherein the topology manager synchronizes applications to at least one of the members.
5. The virtual applications architecture of claim 1 wherein the topology manager is a controller.
6. The virtual applications architecture of claim 5 wherein the controller at least one of provides automatic failover and administrator-selected failover.
7. The virtual applications architecture of claim 6 wherein the members include an election hierarchy for determining a new controller.

8. The virtual applications architecture of claim 1 wherein the virtual applications manager includes a manifest of available resources.
9. The virtual applications architecture of claim 1 further comprising a replication system for deploying the applications across the plurality of members.
10. The virtual applications architecture of claim 9 wherein the replication system includes at least one of a replication engine and replication drivers.
11. The virtual applications architecture of claim 9 wherein the replication system includes at least one of an automatic mode and a full synchronization mode.
12. The virtual applications architecture of claim 9 wherein the replication system includes a list.
13. The virtual applications architecture of claim 12 wherein the list is an XML file.
14. The virtual applications architecture of claim 12 wherein the replication system includes at least one of an IHaveList, an ActionList, and an UpdateList.
15. The virtual applications architecture of claim 9 wherein the replication system includes a token for determining if a member is already in synchronization.
16. The virtual applications architecture of claim 1 further comprising a performance system for aggregating information from the plurality of members.
17. The virtual applications architecture of claim 16 wherein the information is provided by events from the plurality of members.

18. The virtual applications architecture of claim 17 wherein the events are logged in data stores associated with the plurality of members.
19. The virtual applications architecture of claim 18 wherein the logged events are aggregated by the topology manager.
20. The virtual applications architecture of claim 16 further comprising a failure management system.
21. The virtual applications architecture of claim 20 wherein the failure management system includes configurable rules for enabling automatic actions.
22. The virtual applications architecture of claim 21 wherein the configurable rules are provided by Windows Health Monitor.
23. The virtual applications architecture of claim 9 further comprising a load balancing system.
24. The virtual applications architecture of claim 23 wherein the load balancing system is Network Load Balancing.
25. The virtual applications architecture of claim 20 further comprising a load balancing system.
26. The virtual applications architecture of claim 25 further comprising a service level agreement for adjusting service to a network load.
27. The virtual applications architecture of claim 25 wherein the service level agreement includes rules for adjusting the network load.

28. The virtual applications architecture of claim 27 wherein the rules are based on at least one of time of network requests, origin of network requests, and amount of network requests.

29. A virtual applications architecture, comprising:
means for managing applications across a plurality of members; and
means for defining a plurality of resources comprising the applications;
means for communicating with the plurality of members to determine if the applications have been deployed to the members.

30. The virtual applications architecture of claim 29 further comprising:
means for replicating applications to the plurality of members.

31. The virtual applications architecture of claim 29 further comprising:
means for providing at least one of performance management and failure management.

32. The virtual applications architecture of claim 29 further comprising:
means for providing load balancing.

33. The virtual applications architecture of claim 29 further comprising:
means for providing a service level agreement among the plurality of members.

34. A method for providing a virtual applications architecture, comprising:
managing applications across a plurality of members;
defining a plurality of resources comprising the applications; and
communicating with the plurality of members to determine if the applications have been deployed to the members.

35. The method of claim 34 further comprising:
deploying applications to the plurality of members.

36. The method of claim 35 further comprising:
sending a list to the plurality of members;
receiving an action list from the plurality of members; and
sending an update list to the plurality of members based upon the action list.

37. The method of claim 34 further comprising:
providing performance management.

38. The method of claim 37 further comprising:
generating event logs;
aggregating event logs from the plurality of members; and
providing at least one of collective and individual performance view.

39. The method of claim 34 further comprising:
providing failure management.

40. The method of claim 39 further comprising:
setting up monitors for events;
determining if monitor thresholds have been exceeded; and
performing an action if the monitor threshold has been exceeded.

41. The method of claim 34 further comprising:
providing load balancing.

42. The method of claim 41 further comprising:
replicating load-balancing configuration to the plurality of members;
providing virtual IP addresses; and
distributing network requests to the plurality of members.

43. The method of claim 34 further comprising:
providing service level agreements.

44. The method of claim 43 further comprising:
defining rules for the plurality of members;
determining if the rule thresholds have been exceeded; and
performing actions if the rule thresholds have been exceeded.

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